June 26, 2009

Federal Trade Commission/Office of the Secretary
Room H-135 (Annex M)
600 Pennsylvania Avenue
Washington, DC 20580

The following are the comments of the Alliance of Automobile Manufacturers ("Alliance") to the Federal Trade Commission (FTC) "Fuel Economy Guide Review, Matter No. R711008."

The Alliance expresses our support for the continued publication of the guide and value the guidance it provides to consumers and therefore industry. The Fuel Economy Guide should be kept up-to-date as EPA's regulations are updated and as advances are made in vehicle technologies and fuels.

Plug in hybrid electric vehicles (PHEV), extended range electric vehicles (EREV), and other electrically powered automobiles are in their infancy in the market-place and are expected, in one form or another, to remain for some time to come. Instead of asking consumers to use a confusing back-conversion to a legacy system of measuring fuel economy, we think it makes more sense to adopt a scheme that is easily associated with other consumer electrical usage and can grow into the future.

The following are our specific comments:

1. Electrical energy should be defined as an Alternative Fuel, as in the EPCA statute
In order to harmonize with existing EPCA [Energy Policy and Conservation Act of 1975 at 49 USC § 32901 (a)(1)(J) ] statutes, and FTC labeling requirements for alternative fueled vehicles (16 CFR 309), the FTC guideline should define electrical energy as an alternative fuel for automobiles. Section 259.1 (g) of the FTC guideline should be consistent with Section 259.1 (a) and consistent with 16 CFR 309.1 (c).

2. Electrical energy use should be expressed in Miles/kWh or kWh/100 Miles
We do not support the use of equivalent petroleum-based fuel economy to describe the energy use of an electrically powered automobile. Miles per gallon equivalent, which is

used to set a CAFÉ value for electrically powered automobiles, has no real-world meaning and would be misleading and potentially unfair or deceptive to consumers.

Advanced technology architectures, such as PHEV and EREV, will differ in fundamental design and provide different levels of fuel and electrical energy consumption for a given operating mode. PHEVs and EREVs will provide very low fuel consumption (higher fuel economy) for a limited driving distance, and depending on design, switch modes to a higher level of fuel consumption (lower fuel economy). This bi-modal fuel economy is in contrast to an "average" fuel consumption rate associated with traditional non-hybrid vehicles.

Consumers are already well exposed to battery-powered products (such as laptops and cell phones) and purchasing household electricity by rate, so they are familiar with the following concepts:

- How long does the electric charge last?
- How long does it take to recharge the battery?
- Liquids are purchased in gallons v. electricity is purchased in kWh

Since consumers consider electricity an alternative fuel for motor vehicles, the energy usage of PHEVs, EREVs, and other electrically powered automobiles should be expressed in appropriate electrical consumption or economy terms. A reasonable way to convey to consumers the fuel economy of these advanced technology vehicles is miles per kilowatt hour (or its inverse, such as kWh/Miles). This metric conveys energy use to consumers in a similar manner as MPG for conventional fuels.

Therefore, we recommend that a section 16 CFR § 259.1(h)(2) be replaced with the version below so that fuel economy of electrically powered vehicles and plug-in hybrid vehicles is based on electrical consumption:

> (h) *Fuel economy*.
> (1) The average number of miles traveled by an automobile or group of automobiles per volume of fuel consumed as calculated in this part; or
> ~~(2) The equivalent petroleum-based fuel economy for an electrically powered automobile as determined by the Secretary of Energy.~~
> (2) For an electrically powered or plug-in hybrid automobile, miles per kilowatt hour or kilowatt hours per 100 miles.

3. Comments to FTC Question # 4 regarding cruising range claims

Cruising range estimates for PHEV and full battery electric-only vehicles (BEV) will vary depending on a vehicle's technology architecture (e.g., battery size and power needs). Either conventional fuel (gasoline or diesel) or electrical consumption will also vary based on driving distances associated with each design. A manufacturer may choose to specify cruising range as "an all electric range and a total range with engine" for one architecture and specify cruising range simply as "range on electricity" for a different architecture. Both cruising range estimates would be considered reasonable and both would be informative to the consumer for that type of architecture without confusing or misleading them. At this time advanced technologies are still developing and there will be potentially many architectures available. The need for guidance on cruising range can be revisited in the

future if one of these becomes more prevalent or useful and the customers expectation of performance becomes more specific.

Please be aware, the selection of architectures is a competitive issue because different architectures accentuate different type of cruising range. Alliance manufacturers may not agree on which measure is preferable because a different measure may be preferable for their specific architecture. However, depending on the circumstances, this does not mean that other measurements are unreasonable. Individual members of the Alliance may comment individually on this question #4 to the FTC.

4. The latest SAE standards should be referenced, not older versions

Section 16 CFR § 309.22 specifies that cruising range for electric vehicles is to be determined by using the 1993 version of SAE J1634. This reference was technically cancelled in October 2002; however this procedure is currently being updated by SAE to reflect new technology for BEVs and EREVs. We recommend that the FTC amend its proposal to reference use of the new SAE J1634 once it is revised. This comment applies also to SAE reference J1711 (which addresses electrical range and equivalent electrical range for PHEVs) and is currently being revised (expected to be completed in the Fall of 2009).

5. Discussions are currently ongoing with EPA on Fuel Economy labeling for Advanced Technology Vehicles

We are currently discussing with EPA how to best label Advanced Technology Vehicles for Fuel Economy labeling (FE Labeling pursuant to Energy Policy and Conservation Act of 1975 beginning at 49 USC § 32901). There are two types of information which should be displayed on the label: statutorily required information and additional information helpful to the consumer at the point in time of purchase to help compare vehicle performance on a level playing field. The ultimate result of our discussions will be an EPA guidance on how to label Advance Technology vehicles, which will also be instructive for any future revisions to the FTC guidelines.

We point out to you that EPA may be constrained by 34-year old statutory language that may require equivalent petroleum based equivalent fuel economy for the automobile window label. However, we believe EPCA provides the EPA flexibility and believe that the FTC's determination under a different statute should be based on what is reasonable and informative, without confusing or misleading consumers.

If you should have any questions regarding these comments, please contact me at (248) 357-4796.

Sincerely,

Giedrius Ambrozaitis
Director, Environmental Affairs

cc: Linc Wehrly, EPA
Chris Nevers, EPA